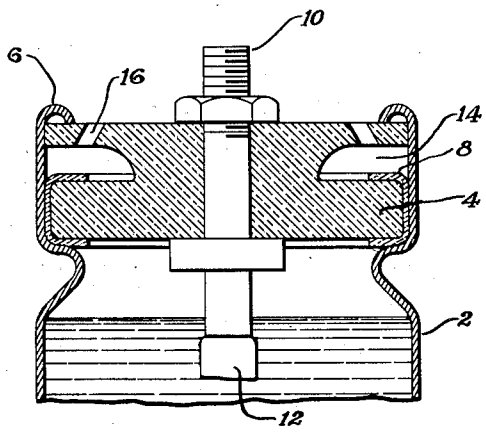
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ELECTROLYTIC CONDENSER

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ELECTROLYTIC CONDENSER

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2 Claims. (Cl. 175—315)

The present invention relates to electrolytic condensers.

The usual form of electrolytic condenser comprises a container provided with a cover member to which the anode may be attached. The container is partially filled with the usual electrolyte, which may be a mixture of borax and boric acid in solution. The electrolyte possesses the peculiar property of creepage, that is to say, no matter how tightly the cover may be secured in the container, the electrolyte tends to creep through the small space between the cover and the container and thus eventually to reach the outside of the condenser. Upon contact with the atmosphere, crystals are formed around the edge of the cover. These crystals do not in any way impair the operation of the condenser, but they are unsightly and often lead a purchaser who is unaware of the fact that they are of no importance, to return the condenser to the manufacturer.

Although creepage in an electrolytic condenser cannot be easily avoided, the present invention avoids the formation of unsightly crystals at places where they can be readily observed. This is accomplished by providing the cover with an internal recess into which the liquid may creep and which is provided with access to the atmosphere, whereby the crystals form in the recess without permitting the liquid to creep to the outside of the container.

The accompanying drawing is a side elevation of the upper part of an electrolytic condenser embodying the features of the present invention.

The illustrated embodiment of the invention comprises a metal container 2, having a cover 4, which is received in the upper part of the container. The container fits snugly around the cover and the top edge is spun as indicated at 6 to provide as tight a joint as possible between the container and the cover. A soft rubber gasket 8 interposed between the cover and the container eliminates creepage of electrolyte as far as possible.

Supported by the cover is an anode post 10 which carries the usual filming anode indicated generally at 12. The container is filled with electrolyte to the level indicated.

The cover 4 is provided with an annular recess 14 which is completely enclosed by the upper part of the container. Communicating with the recess 14 is a series of small openings 16 which are drilled in the upper exposed surface of the cover. Any liquid which unavoidably creeps by the gasket 8 necessarily finds its way into the annular recess 14 which communicates with the atmosphere through the openings 16. Upon contact with air in the recess 14, crystals are formed. These crystals are therefore localized in the recess 14 where they cannot be observed. After a time, the formation of the crystals in the recess effectually seals against further creepage of liquid. The formation of crystals in the recess 14 in no way affects the operation of the condenser but merely serves to avoid the unsightly effect of crystallization on the outside of the container, as is usual in ordinary electrolytic condensers.

What is claimed is:

1. An electrolytic condenser comprising a container, a cover sealed in the container having a recess into which liquid may creep from the container, the recess being invisible externally but communicating with the atmosphere to localize the formation of crystals therein.

2. An electrolytic condenser comprising a container, a cover sealed in the container and having an annular recess into which liquid creeping from the container may localize, the cover having small openings communicating with the recess to afford contact of air with the liquid.

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